EXHIBIT 8
REDACTED

PURSUANT TO PROTECTIVE ORDER

Page 1

1   IN THE UNITED STATES DISTRICT COURT
          FOR THE EASTERN DISTRICT OF TEXAS
2   SHERMAN DIVISION
3 THE STATE OF TEXAS, et   )
   al.,   )
4   ) Case No.
              Plaintiffs,   ) 4:20-cv-00957-SDJ
5   )
   vs.   ) Hon. Sean D. Jordan
6   )
   GOOGLE LLC,   )
7   )
              Defendants.   )
8
9   WEDNESDAY, APRIL 17, 2024

    CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER
10
                      - - -
11
12   Videotaped deposition of ████████
13 ████, held at Freshfields Bruckhaus Deringer,
14 100 Bishopsgate, London, United Kingdom,
15 commencing at 9:25 a.m. British Summer Time,
16 on the above date, before Carrie A. Campbell,
17 Registered Diplomate Reporter, Certified
18 Realtime Reporter, Illinois, California &
19 Texas Certified Shorthand Reporter, Missouri,
20 Kansas, Louisiana & New Jersey Certified
21 Court Reporter.
22
23   - - -
24
25 Job No. MDLG6633025

PURSUANT TO PROTECTIVE ORDER

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 1              A P P E A R A N C E S :
 2
 3       NORTON ROSE FULBRIGHT US LLP
         BY:   PETER M. HILLEGAS      (VIA ZOOM)
 4             peter.hillegas@nortonrosefulbright.com
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 6
 7       and
 8
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12
         and
13
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17       Counsel for Texas, Idaho, Louisiana
         (The Lanier Law Firm only),
18       Mississippi, North Dakota,
         Mississippi, South Carolina, and
19       South Dakota
20
21       STATE OF TEXAS
         OFFICE OF THE ATTORNEY GENERAL
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         Counsel for Plaintiff State of Texas
25
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 1        FRESHFIELDS BRUCKHAUS DERINGER US LLP
          BY:   ANDREW EWALT
 2              andrew.ewalt@freshfields.com
                TYLER GARRETT
 3              tyler.garrett@freshfields.com
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 4        Washington, DC  20005-3960
          (202) 777-4500
 5        Counsel for Google LLC

 6

 7    ALSO PRESENT:
 8              ███████████████, Litigation and
      Regulatory Counsel, Google LLC
 9
                JONATHAN JAFFE, consultant, (VIA ZOOM)
10
                RAY MOORE, trial technician, Precision
11    Trial Solutions, (VIA ZOOM)
12
13    V I D E O G R A P H E R :
          CHRIS RITONA,
14        Golkow Litigation Services
15                               - - -
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19
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21
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1              VIDEOGRAPHER:  We are now on

2      the record.  My name is Chris Ritona.

3      I am the videographer for Golkow

4      Litigation Services.

5              Today's date is April 17, 2024,

6      and the time is approximately

7      9:25 a.m. British Summer Time.

8              This remote video deposition is

9      being held in the matter of the State

10     of Texas, et al., versus Google LLC,

11     for the US District Court, for the

12     Eastern District of Texas, Herman

13     Division, Civil Action

14     Number 4:20-CV-00957-SDJ.  And the

15     deponent today is ███████████.

16             All parties to this deposition

17     are appearing remotely and have agreed

18     to the witness being sworn in

19     remotely.

20             Due to the nature of remote

21     reporting, please pause briefly before

22     speaking to ensure all parties are

23     heard completely.

24             Will counsel please identify

25     themselves for the record?
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 1            MR. HILLEGAS:  Peter Hillegas

 2       of Norton Rose Fulbright on behalf of

 3       the State of Texas.

 4            Also with me is Jiang Wu, also

 5       of the State of Texas -- also of

 6       Norton Rose Fulbright for the State of

 7       Texas.

 8            And for the plaintiff,

 9       Mr. Jonathan Jaffe.

10            MR. EWALT:  Andrew Ewalt from

11       Freshfields on behalf of Google.

12            With me is my colleague Tyler

13       Garrett, also from Freshfields, and

14       ███████████████  from Google.

15            Mr. ████████, Mr. Garrett and I

16       are all present in the room with the

17       witness.

18            VIDEOGRAPHER:  Thank you.

19            The court reporter today is

20       Carrie Campbell, and she will now

21       please swear in the witness.

22

23                      ███████████,

24     of lawful age, having been first duly sworn

25     to tell the truth, the whole truth and
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1   nothing but the truth, deposes and says on

2   behalf of the Plaintiffs, as follows:

3

4   DIRECT EXAMINATION

5   QUESTIONS BY MR. HILLEGAS:

6   Q.   Good morning, ███████.

7   Could you please state your

8   full name for the record?

9   A.   My name is ████████████.

10   Q.   Where do you live?

11   A.   Currently I live in Zumikon in

12   Switzerland.

13   Q.   Where are you today?

14   A.   Right now, I'm in London.

15   Q.   Do you work for Google?

16   A.   That's correct.

17   Q.   What is the address of the

18   location for Google where you work?

19   A.   That would be

20   Brandschenkestrasse 110 in Zurich.

21   Q.   ████████, have you ever been

22   deposed before?

23   A.   No, this is my first

24   deposition.

25   Q.   So I'll lay out the rules for

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 1          Q.      When did you start working at

 2   Google?

 3          A.      I believe it was October 2005.

 4          Q.      Was that immediately after you

 5   received your Ph.D.?

 6          A.      It was a year after.  Or it

 7   depends kind of when I left grad school

 8   versus when the Ph.D. was formally granted.

 9   I had a year of postdoc.

10          Q.      Where did you do your postdoc

11   research?

12          A.      At Rutgers University and at

13   Bell Labs.

14          Q.      Bell Labs is also in New

15   Jersey?

16          A.      That is correct.

17          Q.      Do you know what a second-price

18   auction is?

19          A.      I have a general idea.

20          Q.      What's a second-price auction?

21          A.      So it's a type of auction for

22   selling one item where you have one seller,

23   multiple bidders.

24                  The bidders -- each bidder gets

25   to submit a bid, and then the highest bid
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 1    wins.  And they pay the second price, which
 2    depends on the flavor of the auction.  It's
 3    either the second highest bid or sometimes
 4    you have floor prices or zero prices or
 5    whatever you call them, in which case the
 6    winning bidder would pay the maximum of the
 7    second highest competing bid or the floor
 8    price.
 9         Q.     What are the benefits of
10    running a second-price auction?
11         A.     I mean, well, what are the
12    benefits of running an auction?  If you want
13    to sell an item, it's one of possible ways of
14    going about selling your item.
15         Q.     What are the benefits of a
16    second-price auction specifically?
17         A.     It's one of the auction
18    formats.  In the academic literature, kind of
19    it's the textbook example of an
20    incentive-compatible auction where you can
21    prove a mathematical theorem for a bidder in
22    kind of the textbook setting.
23              The bidder -- the bidder's
24    strategy is to submit a bid that equals
25    their -- their true value -- or their value,
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1   how much they are willing to pay for the item

2   under consideration.

3   Q.   And that's because they won't

4   actually have to pay the full amount.

5   Right?

6   A.   So if you want to go through

7   the full analysis, it's a case analysis. You

8   can say, well, what if you bid higher, what

9   can happen. What if you bid lower than

10 your -- than your value for the item. And

11 this type of case analysis lets you prove a

12 theorem saying that without loss of

13 generality, the bidder might as well submit a

14 bid equal to how much they value the item.

15   Q.   And what are the benefits of a

16 second-price auction for a pub -- for a

17 seller?

18   A.   So it depends on, again, the

19 environment, what is being sold. Lots of

20 considerations. So if you are a seller, you

21 might want to consider different auction

22 formats and pick whatever format makes sense

23 for you.

24   Q.   So my question is for a

25 second-price auction. Why would a seller

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 1    choose a second-price auction?
 2                    MR. EWALT:  Objection.  Form.
 3                    THE WITNESS:  So I can offer
 4          some reasons.  I can speculate.
 5                    So second-price auction is a
 6          form of auction that doesn't require
 7          multiple rounds.  So it's a
 8          single-round auction.  Everybody
 9          submits a sealed bid, and then a
10          winner is declared.
11                    So it's not good -- it's good
12          for an environment where you cannot
13          afford multiple iterations.  Like
14          there are auctions where people can
15          submit multiple bids over time.  This
16          is not one of those formats.
17                    So it's a kind of single-shot
18          auction format that's over in one
19          round.  There's not multiple rounds.
20    QUESTIONS BY MR. HILLEGAS:
21          Q.     So one of the benefits of a
22    second-price auction is it's fast?
23                    MR. EWALT:  Objection.  Form.
24                    THE WITNESS:  So it's not an
25          iterative auction format.  It's a
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```
 1    but I believe it was a flavor of that idea,

 2    that you would pay one cent more than the

 3    next highest bid.

 4         Q.      Do you know what a first-price

 5    auction is?

 6         A.      I believe I do.

 7         Q.      What is a first-price auction?

 8         A.      So first-price auction, again,

 9    it's a single -- a single-shot auction where

10    everybody submits a sealed bid, and then the

11    auctioneer looks at all of the bids.  The

12    highest bids wins, and the winner pays

13    whatever bid they submitted.

14               There is also a flavor with

15    reserve prices where the auctioneer can

16    decide that they will not sell the item

17    unless the bid exceeds a preset reserve

18    price.

19         Q.      What are the benefits of a

20    first-price auction for the seller?

21         A.      Oh, it's an auction format.  If

22    you want to sell an item using an auction,

23    first-price auction is a common auction

24    format.

25         Q.      First-price auction is a common
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 1    auction format, but I've asked you what are

 2    the benefits of a first-price auction for the

 3    seller.

 4               Are you able to identify any?

 5               MR. EWALT:  Objection to form.

 6               THE WITNESS:  Benefits.  So in

 7         some cases it's simpler because the

 8         computation of the transaction price

 9         doesn't depend on anything except the

10         winning bid.

11               So if you are thinking about

12         implementing it as a computer program,

13         the program is slightly simpler.  So

14         that's what I would name.

15               And if you were into auction

16         theory, you could kind of try and

17         study the dynamics and how bidders

18         respond to different auction formats

19         and kind of study, for example, if

20         you're a seller, what are your

21         objectives, and which auction format

22         best achieves the objectives that you

23         have.

24    QUESTIONS BY MR. HILLEGAS:

25         Q.      So ease of computation is a
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1   benefit to the exchange.

2   Right?

3   MR. EWALT: Objection to form.

4   THE WITNESS: So I wouldn't say

5   it's a huge benefit.   Kind of -- it's

6   not so difficult to implement

7   different auction rules.

8   It could be a benefit in

9   various constrained environments

10   where, for example -- or -- okay.   So

11   I would say there are many different

12   environments where you might consider

13   running an auction, and in some of

14   them, kind of certain auction rules

15   might be preferable to others.

16   QUESTIONS BY MR. HILLEGAS:

17   Q.   But the seller is not the one

18   building the auction.

19   Correct?

20   A.   So, again, it depends on the

21   environment.   I can imagine sellers who would

22   build their own auction logic.   I can imagine

23   environments where a seller would outsource

24   the auctioning logic to another party.   So I

25   would say it depends on context.

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 1          Q.      In the context of an exchange
 2    with a seller and a buyer, the seller is
 3    participating, right?  They're not running
 4    the auction?
 5               MR. EWALT:  Objection to form.
 6               THE WITNESS:  So I would say if
 7          you assumed the existence of an
 8          exchange, then, yes, the exchange
 9          would be a separate entity from the
10          seller.
11    QUESTIONS BY MR. HILLEGAS:
12          Q.      And assuming the existence of
13    an exchange, what are the benefits of a
14    first-price auction to the seller?
15          A.      So it's a -- so it depends on
16    the seller's objectives and also the choice
17    the seller might have where -- like, are
18    there multiple exchanges the seller might
19    want to work with, in which case the seller
20    should consider the merits of the different
21    computing options.
22          Q.      So it's your position that a
23    benefit of a first-price auction to a seller
24    is that they can engage in multiple auctions?
25               MR. EWALT:  Objection to form.
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 1            auction, which in general is in the --
 2            in the seller's control.
 3                     There is also the question of
 4            reserve prices.  Would the seller wish
 5            to impose some kind of minimum price
 6            on bidders.
 7                     There are various formats where
 8            people might want to charge an
 9            entrance fee, again, depending --
10            depending on the format and what
11            they're trying to accomplish.
12                     So it depends a lot -- and of
13            course there are all questions about
14            how much information do you have about
15            an item being sold.  Are you bidding
16            with -- what is -- what is each
17            bidder's understanding of the item
18            being auctioned.
19                     So I would say there's a lot of
20            nuance that kind of prevents me from
21            giving a very general answer.
22       QUESTIONS BY MR. HILLEGAS:
23            Q.    So because you don't understand
24       the rules of an auction, you aren't able to
25       identify a benefit to running that auction.
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1   Right?

2   MR. EWALT: Objection to form.

3   THE WITNESS: I can say in a

4   specific context, maybe like the

5   simplicity of charging the winner the

6   first -- the price they -- the amount

7   they bid, if you like that aspect of

8   the auction, then by all means, go

9   ahead and use that auction format.

10   QUESTIONS BY MR. HILLEGAS:

11   Q.   Are you able to identify any

12   downsides of using a first-price auction over

13   a second-price auction for a seller, holding

14   all of your variables constant?

15   A.   So the theoretical answer and

16   the answer why many academics historically

17   have preferred studying second-price auctions

18   was that in a first-price auction a bidder

19   needs to think about their bidding strategy.

20   And their bidding strategy, at least in a

21   theoretical model, depends on how much other

22   people -- or on your beliefs about how much

23   other people might be bidding.

24   So if you expect very little

25   competition, you can save money by bidding

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 1    lower.  Whereas if you expect tight

 2    competition, then you might want to bid

 3    higher.

 4                   And so if this is kind of how

 5    the bidding strategy for a bidder looks like,

 6    it's kind of complex because you have to make

 7    these predictions about other people's

 8    bidding behavior and even their presence and

 9    their evaluations.  And so from an academic

10    perspective, doing this is complicated for a

11    bidder.

12                   And so that would be one reason

13    for why kind of academically you might want

14    to prefer an auction format where the bidding

15    strategy for the bidder can be simpler, such

16    as an incentive-compatible auction, of which

17    a second-price auction would be an example.

18         Q.    Do you believe that auctions

19    should be fair?

20         A.    In general, I'm all for

21    fairness.

22         Q.    Do you believe that people

23    participating in auctions should be able to

24    know what the rules of the auction are?

25         A.    I think it depends on the
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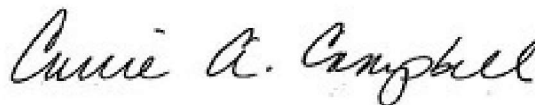
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1   CERTIFICATE
2   I, CARRIE A. CAMPBELL, Registered
    Diplomate Reporter, Certified Realtime
3   Reporter and Certified Shorthand Reporter, do
    hereby certify that prior to the commencement
4   of the examination, ███████████, was duly
    sworn by me to testify to the truth, the
5   whole truth and nothing but the truth.
6   I DO FURTHER CERTIFY that the
    foregoing is a verbatim transcript of the
7   testimony as taken stenographically by and
    before me at the time, place and on the date
8   hereinbefore set forth, to the best of my
    ability.
9
                I DO FURTHER CERTIFY that I am
10 neither a relative nor employee nor attorney
    nor counsel of any of the parties to this
11 action, and that I am neither a relative nor
    employee of such attorney or counsel, and
12 that I am not financially interested in the
    action.
13
14
15   _Carrie A. Campbell_
16   CARRIE A. CAMPBELL,
              NCRA Registered Diplomate Reporter
17   Certified Realtime Reporter
              California Certified Shorthand
18   Reporter #13921
              Missouri Certified Court Reporter #859
19   Illinois Certified Shorthand Reporter
              #084-004229
20   Texas Certified Shorthand Reporter #9328
              Kansas Certified Court Reporter #1715
21   New Jersey Certified Court Reporter
              #30XI00242600
22   Louisiana Certified Court Reporter
              #2021012
23   Notary Public
              Dated: April 18, 2024
24
25